

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-24 (Canceled)

25. (Currently Amended) A method of selecting an asphalt emulsion mixture to be used for reconstructing a paved road, comprising:

providing reclaimed asphalt pavement particles;

selecting an a substantially solvent free emulsion;

mixing said emulsion and said reclaimed asphalt pavement particles to form a proposed an asphalt emulsion mixture; and

testing said proposed asphalt emulsion mixture for performance using a raveling test and a moisture susceptibility test; and

selecting said asphalt emulsion mixture to be used for reconstructing said paved road after testing said proposed asphalt emulsion mixture for performance.

26. (Currently Amended) The method of claim 25, further comprising:

testing said proposed asphalt emulsion mixture for performance using a stability test; and

selecting said asphalt emulsion mixture to be used for reconstructing said paved road after testing said proposed asphalt emulsion mixture for performance.

27. (Currently Amended) The method of claim 26, further comprising:

testing modulus of said proposed asphalt emulsion mixture; and

selecting said asphalt emulsion mixture to be used for reconstructing said paved road after testing modulus of said proposed asphalt emulsion mixture.

28. (Previously Presented) The method of claim 27, wherein resilient modulus is tested.

29. (Currently Amended) The method of claim 25, further comprising:

testing modulus of said proposed asphalt emulsion mixture; and  
selecting said asphalt emulsion mixture to be used for reconstructing said paved road  
after testing modulus of said proposed asphalt emulsion mixture.

30. (Previously Presented) The method of claim 29, wherein resilient modulus is tested.

31. (Currently Amended) The method of claim 25, further comprising:

testing said proposed asphalt emulsion mixture for performance using a thermal cracking test; and

selecting said asphalt emulsion mixture to be used for reconstructing said paved road  
after testing thermal cracking of said proposed asphalt emulsion mixture.

32. (Currently Amended) The method of claim 25, further comprising:

testing said proposed asphalt emulsion mixture for performance using a thermal cracking test and a stability test; and

selecting said asphalt emulsion mixture to be used for reconstructing said paved road  
after testing thermal cracking and stability of said proposed asphalt emulsion mixture.

33. (Currently Amended) The method of claim 25, wherein said selected asphalt emulsion mixture comprises a emulsifier is cationic emulsifier.

34. (Currently Amended) The method of claim 25, further comprising:

taking samples of said road; and

using said samples to make said reclaimed asphalt pavement particles.

35. (Previously Presented) The method of claim 34, further comprising:

inspecting said samples to determine the composition of layers in said samples, the thickness of said layers, and variations between samples.

36. (Previously Presented) The method of claim 34, wherein said samples are crushed to form reclaimed asphalt pavement particles.
37. (Previously Presented) The method of claim 34, wherein said samples are representative of variations in the road.
38. (Currently Amended) The method of claim 25, wherein at least two different proposed asphalt emulsion mixtures are formulated and tested for performance before said asphalt emulsion mixture to be used for reconstructing said paved road is selected for at least two different parts of the road having different compositions.
39. (Currently Amended) The method of claim 25, wherein said selected asphalt emulsion mixture ravel no more than about 2% by weight after curing for at least about 4 hours.
40. (Currently Amended) The method of claim 31, wherein said selected asphalt emulsion mixture has a critical cracking temperature that is at least as low as the possible coldest temperature of said road with 98% reliability.
41. (Currently Amended) The method of claim 25, wherein said selected asphalt emulsion mixture has a retained strength, as determined by said a moisture susceptibility test, of at least about 70%.
42. (Currently Amended) A method of reconstructing a paved road, comprising:  
forming a proposed asphalt emulsion mixture from an emulsion and reclaimed asphalt pavement particles;  
testing said proposed asphalt emulsion mixture for performance using a raveling test and a moisture susceptibility test; and  
selecting an asphalt emulsion mixture to be used for reconstructing said paved road after testing said proposed asphalt emulsion mixture for performance;

~~The method of claim 25, further comprising:~~

removing pavement from said road to form reclaimed asphalt pavement particles, leaving at least about an inch of said pavement on said road;  
mixing said reclaimed asphalt pavement particles from said road with an said emulsion to form said selected asphalt emulsion mixture ~~a cold in-place recycling layer~~; and  
applying said selected asphalt emulsion mixture to said partially reclaimed road so as to form a cold in-place recycling layer ~~to~~ on said road.

43. (Previously Presented) The method of claim 42, further comprising:

inspecting said road to determine if said road is thick enough to leave at least about an inch base of pavement after removing pavement;  
determining if said road has a structurally sound base; and  
determining if said road has good drainage.

44. (Currently Amended) The method of claim 42, further comprising:

applying to said cold in-place recycling layer a wearing surface selected from the group consisting of a cold, hot, or warm mix overlay, a seal coat, a chip seal, a fog seal, or other surface treatment.

45. (Previously Presented) The product of the process of claim 42.